REMARKS

In reply to the Office Action mailed January 3, 2007, and in view of the foregoing amendments and following remarks, reconsideration is requested. Claims 5 and 19-54 remain in the application of which claims 5, 24, 30, 36, 42 and 43 are independent.

Rejections under 35 USC § 102

Claims 5, 21, 23, 24, 27, 29, 30, 33, 35, 36, 39, 41 and 43-44, of which claims 5, 24, 30, 36 and 43 are independent, were rejected under 35 USC § 102 in view of US Patent 6,279,061 (hereinafter, "Aoki"). While the Office Action refers to claims 6-18 also as being rejected, Applicant believes that this is a typographical error, as claims 6-18 were previously cancelled. The rejection is respectfully traversed.

The Office Action maintains that the following passage of Aoki meets several proposed interpretations of the claims as they existed prior to this amendment:

> "The LINK 52 reads out the image data from the FIFO memory 61 on a frame-by-frame basis, packetizes the read-out image data, and output[s] resulting packets to the PHY 51. The PHY 51 transmits those packets via the 1394 Bus 11 as isochronous packets, whereby the packets are supplied to the editor 1."

As noted in Applicant's prior replies, in Aoki the transfer of video data over the 1394 bus is accomplished using standard 1394 isochronous data packets. Thus, Aoki does not teach *using frame by frame flow control over high speed serial bus*. All of the independent claims have been amended to clarify this distinction.

In addition, Aoki initiates playback of video by having the host device send a "PLAY" command to the conversion device. This sole command is not "request packet*s*" (plural) as claimed (emphasis added). Plural request packets are used, one for each video frame (as noted in claims 30 and 36), to provide frame by frame flow control.

Accordingly, independent claims 5, 24, 30 and 36 are distinguishing over Aoki. Dependent claims 21, 23, 27, 29, 33, 35, 39 and 41 are distinguishing over Aoki for at least the same reasons.

In addition, regarding dependent claims 21, 27, 33 and 39, the Office Action asserts that the "Destination_ID" in Fig. 2 of Aoki corresponds to the claimed "target field". In Aoki, the Destination_ID indicates the destination to which a packet is being sent. Thus, in Aoki, if a packet is being sent from the conversion device 2 to the host device 1, then the destination_ID

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field in the packet would indicate the host device 1. However, claim 21 recites that the target field (which is in a data packet that includes the video data and that is sent from the host device to the video processing device – see claim 5) "indicat[es] a device to which the video processing device is directed to transfer the video data." In other words, the recipient of the data packet receives information about yet another device to which it is directed to further transfer the video data. Similar interpretations apply to claims 27, 33 and 39. The destination_ID in Aoki does not meet this limitation and the rejections of claims 21, 27, 33 and 39 are traversed for at least this additional reason.

Regarding independent claim 43 and dependent claim 44, the Office Action equated "capable of receiving data" as relating to the transaction request/response process in IEEE-1394. The claim has been amended to clarify that "capable of receiving data" is intended to mean "having sufficient memory available for receiving video data." Thus, claims 43 and 44 as amended exclude the transaction request/response process of IEEE-1394, which merely confirms and the source and destination nodes can communicate. Moreover, in claim 43, in response to *each* request packet, the host device sends video data. In the transaction request/response process in IEEE-1394, there is no packet that would cause the conversion device 2 of Aoki to start sending video data to its host device 1. Thus, the packets sent during the transaction request/response process in IEEE-1394 do not meet the limitations of the claimed "request packets" and "data packets" sent in response to such "request packets," as recited in claim 43. Therefore, claim 43 is not anticipated by Aoki.

In addition, regarding dependent claim 44, the Office Action equates the packet information from a source node sent during bus arbitration, which includes speed information, to the claimed "packet rate field". However, claim 44 recites that "*the request packets* include a packet rate field that specifies a packet rate at which the host device is to send the video data to the video processing device." In independent claim 43 as amended, *each* request packet "indicates that the video processing device has sufficient memory available to be capable of receiving video data of a video frame." In response to *each* of such request packets, the claimed host device sends data packets with video data. The speed information sent between devices during bus arbitration in Aoki is not included in "request packets", wherein *each* request packet a. "indicates that the video processing device has sufficient memory available to be capable of receiving video data of a video frame" and b. "include a packet rate field that specifies a packet

rate at which the host device is to send the video data to the video processing device", and c. causes the host to send "send, in response to a request packet, data packets including the video data of a video frame from the memory to the video processing device," as claimed. In other words, the speed information exchanged in Aoki during bus arbitration is not exchanged in messages that actually request and transfer the video data. Therefore, Aoki does not anticipate claim 44.

Rejections under 35 USC §103

Claims 19-20, 25-26, 31-32, 37-38 and 45-48 were rejected under 35 USC §103 in view of Aoki and US Patent 5,241,382 ("Paik"). These rejections are respectfully traversed.

All of these claims 19, 20, 25, 26, 31, 32, 37, 38 and 45-48, are dependent claims. These claims are patentable for at least the same reasons, stated above, as the independent claims from which they depend.

Rejections under 35 USC §103

Claims 22, 28, 34, 40 and 42, of which claim 42 is independent, were rejected under 35 USC §103 in view of Aoki and US Patent 6,105,083 ("Kurtze"). These rejections are respectfully traversed.

The discussion above regarding Aoki's lack of *frame by frame flow control over high speed serial bus*, such as recited in amended independent claim 42, is applicable. Because Kurtze is not relied upon for teaching this limitation, this rejection of independent claim 42 is traversed for at least the same reasons as discussed above in connection with the other independent claims.

Regarding dependent claims 22, 24, 28 and 40, these claims are patentable for at least the same reasons as the independent claims from which they depend.

In addition, Kurtze teaches a video processing device with a clocked signal interface between two components. This signal interface includes lines with data signals, a line with a valid data signal and a line with a boundary data signal. See Fig. 1 of Kurtze. A timing diagram for this interface is shown in Fig. 2C of Kurtze, which is described at Col. 7, lines 28-43 of Kurtze. Kurtze does not teach a packet based request/reply architecture. Instead, in Kurtze data is transferred between devices when control signals from both of the devices are both asserted upon the same clock edge. See Kurtze, Col. 5, line 59 to Col. 6, line 17.

One of ordinary skill in the art would not have had reason to modify Aoki's system, which is based on IEEE-1394 communication, using the teachings of Kurtze. The Office Action refers to Col. 2, lines 25-30 of Kurtze as a motivation for applying Kurtze's boundary signal to Aoki. However, this portion of Kurtze indicates the benefits of Kurtze's hardware interface, not the boundary signals. It would not be reasonable for one of ordinary skill in the art to expect to achieve the benefits of Kurtze's hardware interface by finding a way to implement Kurtze's boundary signal in a packet-based communication protocol such as in Aoki.

New Claims

Dependent claims 49-54 have been added. As dependent claims, these claims are allowable for at least the same reasons as the independent claims from which they depend.

In addition, claims 49-54 recite "wherein each data packet in the plurality of data packets includes a packet header and a data field, *wherein the packet header includes the stream identifier* and the data field includes the video data" (emphasis added). The Office Action equates the claimed "stream identifier" with the PID in the MPEG standard. These PIDs in MPEG, if present in Aoki, would be part of the data transported by IEEE-1394 packets, and thus would be found in the data field for a packet, not the packet header. As noted in the specification of the present application in Fig. 2, and at page 6, lines 6-19, the stream identifiers are part of the packet header in the protocol of the high speed serial bus, and not part of the transported data. Accordingly, dependent claims 49-54 are further distinguishing over Aoki.

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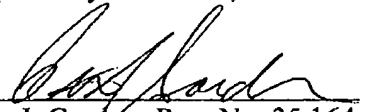Office Action mailed: January 3, 2007

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this reply, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, please charge any fee to **Deposit Account No. 50-0876.**

Respectfully submitted,

April 3, 2007   By: _____

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